Amendments to the Claims

Please cancel Claims 1-7, 10, 11, 14 and 15. Please amend Claims 8, 9, 12, 13 and 17-20. Please add new Claims 21-38. The Claim Listing below will replace all prior versions of the claims in the application:

Claim Listing

1-7. (Canceled)

8. (Currently Amended) A method of treating an allergic or inflammatory condition associated with IgE-mediated degranulation ~~condition in a mammal~~ comprising administering to ~~the~~ a mammal an effective amount of an agent ~~which~~ that binds to CD81 and inhibits IgE-mediated degranulation ~~induces CD81-mediated signal transduction~~.

9. (Currently Amended) ~~A~~ The method ~~according to~~ of Claim 8, wherein the allergic or inflammatory condition is selected from the group consisting of asthma, hay fever ~~or~~ and atopic eczema.

10-11. (Canceled)

12. (Currently Amended) A ~~calcium independent~~ method of inducing an inflammatory response ~~enhancing degranulation~~ comprising administering to a mammal an effective amount of ~~contacting a cell with~~ an agent that binds to CD81 and induces IgE-mediated degranulation ~~which inhibits CD81-mediated signal transduction~~.

13. (Currently Amended) ~~A~~ The method ~~according to~~ of Claim 12, wherein the ~~degranulation~~ inflammatory response is ~~mediated by the FceRI receptor~~ associated with the release of leukotrienes and/or cytokines.

14-15. (Canceled)

16. (Original) An assay for identifying agents which alter CD81-mediated signal transduction, comprising the steps of:

a) combining a cell bearing CD81 with an agent to be tested under conditions suitable for CD81-mediated signal transduction; and

b) determining the level of CD81-mediated signal transduction,

wherein if the level of CD81-mediated signal transduction is altered relative to a control, the agent alters CD81-mediated signal transduction.

17. (Currently Amended) An assay for identifying ~~agents which alter~~ an agent that alters ~~calcium independent~~ CD81-mediated regulation of cell surface receptor signaling, comprising the steps of:

a) combining a cell bearing CD81 and an appropriate cell surface receptor with an agent ~~which alters CD81-mediated signal transduction~~ under conditions suitable for signal transduction by CD81 and the cell surface receptor; and

b) determining the level of cell surface receptor signaling;

wherein if the level of cell surface receptor signaling is altered relative to a control, the agent alters ~~calcium independent~~ CD81-mediated regulation of cell surface receptor signaling.

18. (Currently Amended) ~~A method according to~~ The assay of Claim 17, wherein the cell surface receptor is selected from the group consisting of FcεRI and FcγRIII.

19. (Currently Amended) A method of inhibiting passive cutaneous anaphylaxis in a mammal comprising administering to the mammal an effective amount of an agent that binds to CD81 and inhibits IgE-mediated degranulation ~~which enhances CD81-mediated signal transduction~~.

20. (Currently Amended) ~~A~~ The method of ~~according to~~ Claim 19, wherein the agent is an anti-CD81 monoclonal antibody.

21. (New) The method of Claim 8, wherein the agent is an anti-CD81 antibody.

22. (New) The method of Claim 21, wherein the anti-CD81 antibody is a monoclonal antibody.

23. (New) The method of Claim 8, wherein the allergic or inflammatory condition is selected from the group consisting of autoimmune (Type I) diabetes mellitus, rheumatoid arthritis, ankylosing spondylitis, sarcoidosis, Sjögren's syndrome, multiple sclerosis, inflammatory bowel disease, dermatomyositis, scleroderma, polymyositis, systemic lupus erthematosus, biliary cirrhosis, autoimmune thyroiditis, autoimmune hepatitis, psoriasis, contact sensitivity and atopic dermatitis.

24. (New) The method of Claim 8 wherein the allergic or inflammatory condition is passive cutaneous anaphylaxis.

25. (New) The method of Claim 8, wherein the agent does not alter one or more of FcεR1-induced tyrosine phosphorylation, FcεR1-induced intracellular calcium mobilization and leukotriene C_4 (LTC_4) production.

26. (New) The method of Claim 8, wherein the IgE-mediated degranulation is mediated by FcεRI and/or FcγRIII.

27. (New) The method of Claim 12, wherein said mammal has a condition comprising a bacterial or parasite infection.

28. (New) The assay of Claim 16, wherein the agent enhances CD81-mediated signal transduction.

29. (New) The assay of Claim 16, wherein the agent inhibits CD81-mediated signal transduction

30. (New) The assay of Claim 17, wherein the cell surface receptor is an antigen receptor.

31. (New) The assay of Claim 17, wherein cell surface receptor signaling is determined by measuring the level or amount of an associated signaling molecule.

32. (New) The assay of Claim 17, wherein cell surface receptor signaling is determined using a functional assay.

33. (New) The method of Claim 32, wherein the functional assay is selected from the group consisting of a degranulation assay and a passive cutaneous anaphylaxis assay.

34. (New) The assay of Claim 33, wherein the functional assay is a degranulation assay that comprises measuring the level of serotonin released from cells stimulated in the presence and absence of the agent, wherein if the level of released serotonin is altered in cells in the presence of the agent relative to the level of serotonin released by cells in the absence of the agent, the agent alters CD81-regulated signal transduction.

35. (New) The assay of Claim 16, wherein the cell bearing CD81 is selected from the group consisting of: a mast cell, a basophil, a T cell, a B cell, a monocyte, a granulocyte, a non-lymphoid tumor cell and a basophilic leukemia cell.

36. (New) The assay of Claim 17, wherein the cell bearing CD81 and the cell surface receptor are each selected from the group consisting of: a mast cell, a basophil, a T cell, a B cell, a monocyte, a granulocyte, a non-lymphoid tumor cell, a basophilic leukemia cell, and a cell designed to express both CD81 and a suitable cell surface receptor.

37. (New) An *in vivo* assay for identifying an agent that inhibits mast cell activation comprising the steps of:

a) injecting an antigen-specific IgE intradermally into a localized area of the skin of a mammal, thereby priming a population of mast cells;

b) injecting an agent which interacts with CD81 and is being evaluated for its ability to inhibit mast cell activation into the localized area;

c) administering a solution comprising the antigen which represent the specificity of IgE used to prime the mast cells; and

d) assessing mast cell activation by determining alteration in vascular permeability.

38. (New) The method of Claim 19, wherein the agent is an anti-CD81 antibody.